



First OIE regional workshop on the role of Veterinary Services on animal welfare in natural disasters for Balkan countries

workshop concept, objective and methodology

Paolo Dalla Villa

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WORLD ORGANISATION FOR ANIMAL HEALTH *Protecting animals, preserving our future*



About us



Our mission is to ensure human health, providing appropriate response to public health needs, through scientific knowledge and expertise on food safety, animal health and welfare, control and prevention of transmittable animal diseases, support to food production

Since 2013, National Reference Centre for Urban Hygiene and Non-Epidemic Emergencies (IUUVENE)



Case Report

Veterinary Public Health Activities and Management of the Livestock Sector during Earthquakes and Snowstorms in the Abruzzo Region—Italy, January 2017

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Simple Summary: This article describes the actions that were taken to provide assistance to farm animals during and in the aftermath of earthquakes and snowstorms that hit the Abruzzo region in January 2017. This experience showed the importance of an integrated emergency management response system. An updated information system, in addition to punctual data management, allows for the rationalization of resources and the organization of necessary interventions. This knowledge will be fundamental to the involvement and integration of Regional Veterinary Services (RVS) and the relevant actors in animal welfare in emergency management plans.

Abstract: In 2017 the Abruzzo region, located in central Italy, was struck by a sequence of four moderately powerful seismic events (5.0 magnitude on Richter scale), in addition to heavy snowfall that caused a state of emergency affecting the resident population and farm animals. A total of 282 stables were reported to have collapsed or been damaged and several animals (224 cows, 4025 ewes, 40,725 chickens, 22 horses and 3092 pigs) were killed. The Istituto Zooprofilattico di Abruzzo and Molise “G. Caporale” (IZSAM)—National Reference Center for Veterinary Urban Hygiene and Non-Epidemic Emergencies (IUVENE), played a crucial role in planning, coordinating and controlling veterinary activities during these catastrophic events. Operational and information tools were used to manage the needs of the communities involved, as well as to prioritize the veterinary interventions, record information, provide real-time data access, and produce reporting maps and Geographic Information System (GIS) layers. These events have highlighted how the integration of veterinary services into disaster management efforts can play an important role in protecting the health and welfare of animals, whilst also restoring economic activity and community life.

Keywords: veterinary services; animal welfare; non-epidemic emergencies; disaster management; earthquake

1. Introduction

Disasters of all types, including natural ones, often jeopardize the economy, food security, and the health of humans and animals (Sen and Chander, 2003; Vroegindewey, 2014). Such events may cause significant damages to goods and the severe loss of human and animal life, both for companion animals and livestock. Nearly three million chickens and turkeys, more than thirty thousand pigs and other farmed animals died during Hurricane Floyd in North Carolina in 1999 [1]. In 1999, more than one thousand horses were killed in the wake of Hurricane Andrew in Florida and almost thirty-five

em for the management ary emergencies



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ew SIVENE tools and upgraded architecture

SIVENE web application allows to dynamically create specific able to gather the information needed during an emergency. ary Services, during the inspection of the stables, can collect both or off-line modal data regarding the situation of buildings, the health status of animals present, the supporting infrastructure, etc. 2-hour survey form provided by the application. Data collected can have an immediate picture of situation, also on maps, and for lists.

and user management or (Figure 1) has been designed to be usable natively by mobile id according to the guidelines suggested by AGID (the Italian Digitalization) for Public Administration web applications.

up and work tables we to manage the decoding and basic tables (Figure 2) such as the if an event (Figure 3) or a type of request.

and dynamic check-lists e engine has the dual function of creating the check-lists and them.

new check-list (or survey). It is necessary to define the individual that represent the atomic elements of a survey, for example the test requires an email rather than a data field or a table of data. The Editor (Figure 4) is the environment in which the individual are conceived to be composed in order to carry out a survey, the source a list of basic questions to be used or customized for the int of dynamic check-lists.

r editor (Figure 5) ensures the system a high flexibility and the to customize data collection, based on the different needs that each enery may present. The survey editor allows, to an administrative line the different fields (of different data type) and to include them specific check-list (Figure 6).

presented to the final users different collection forms, that represent sck-list based on dynamic definitions, used to register data from pc a device (tablet or smartphone) also in off-line mode. Then users a data from the SIVENE system in different formats as data tables, RS, etc. for further analysis.

web-GIS application is a strategic tool – at local, regional and vel – for the definition of vulnerability and damage scenarios, set to time according to the type of emergency.

is application (Figure 7) collects, manages and visualizes the data y nearest, territorial maps of risk and damage, and satellite data nergency information management.



usions

ergency management has grown significantly in the past decades. However, support systems that can be used for emergency planning, response and king when Veterinary Services are involved in crisis situations. disasters occurred in Italy, the National Reference Centre for Urban Hygiene (IUVENE) supported the activities of the national, regional and local Veterinary Protection Function “public health, social and veterinary assistance” by e-Information System.

and thanks to the support of the Italian Ministry of Health, the IUVENE nated and an innovative Veterinary Information System for Non-Epidemic tables. The new SIVENE allows to manage, display and analyse data and end-users involved in the response and recovery phases of non-epidemic

is incorporated in an information Platform for the definition of vulnerability the type of risk, which will play a fundamental role in the development and Disaster Management and Risk Reduction Plans for the prevention and risk

reduction. *Int J Environ Res Public Health* **17**, 20–28.



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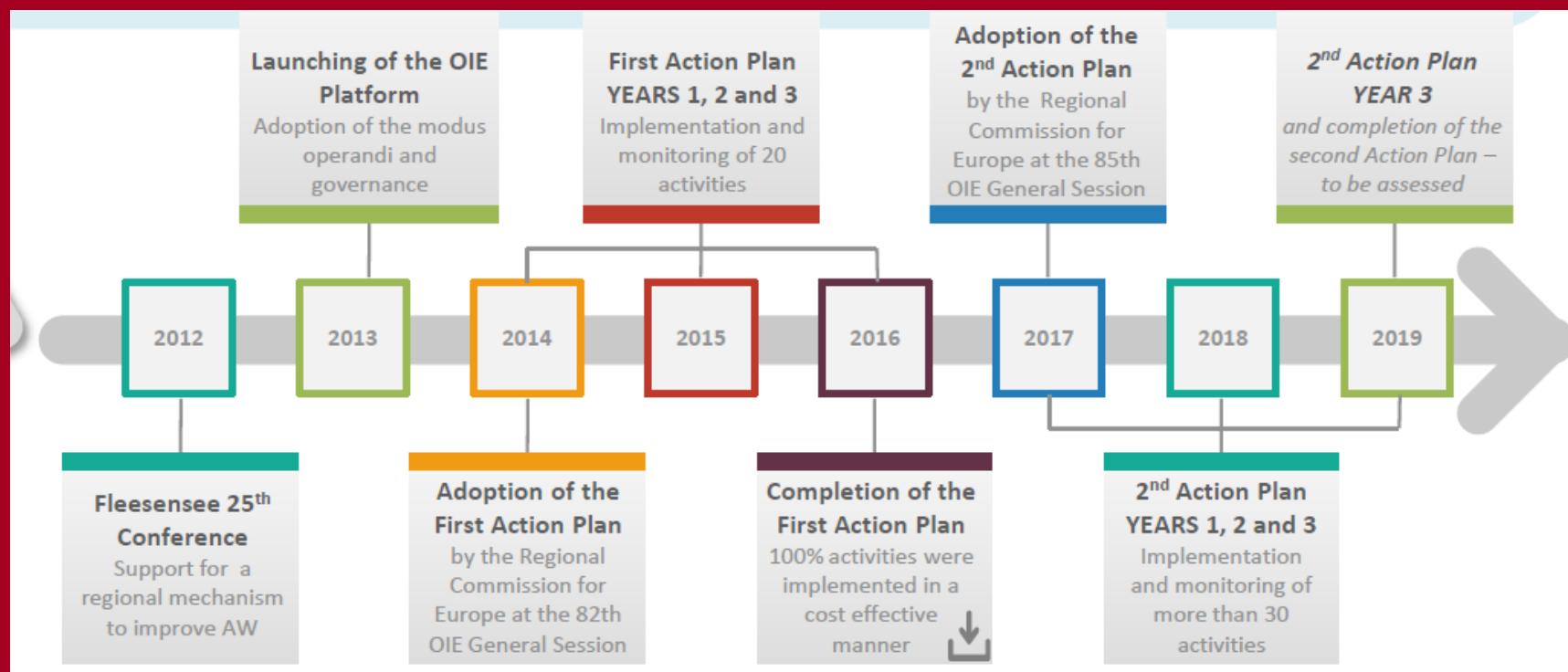
manual

GOOD EMERGENCY MANAGEMENT PRACTICE: THE ESSENTIALS

A guide to preparing for animal health emergencies

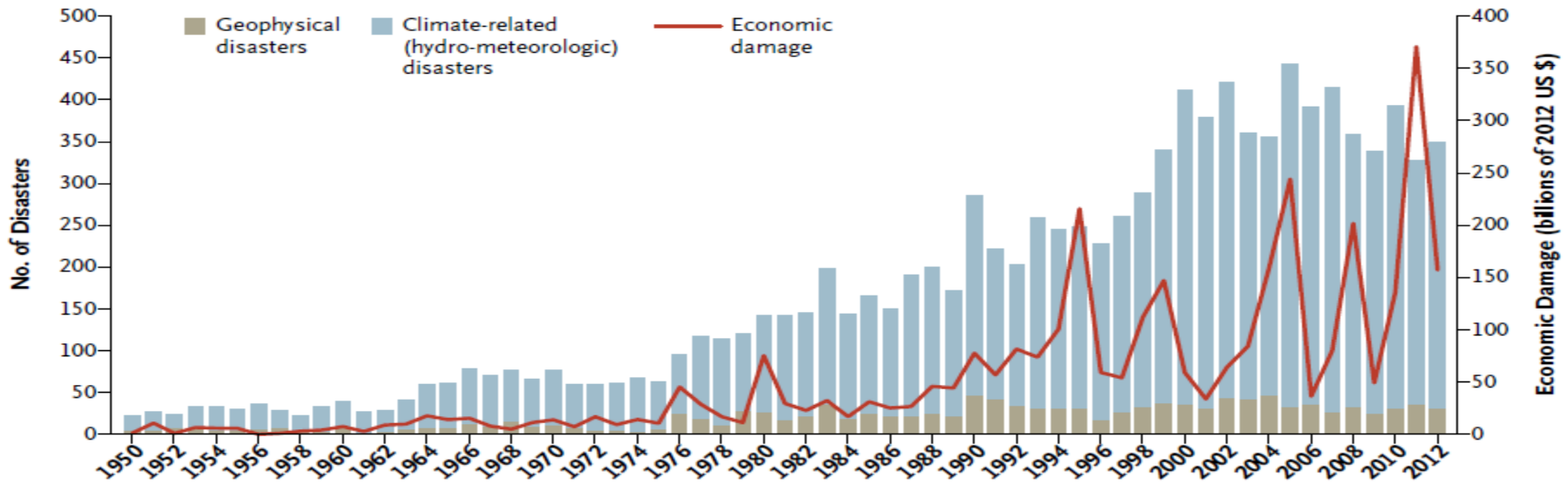


OIE Platform on animal welfare Action Plan for 2017-2019

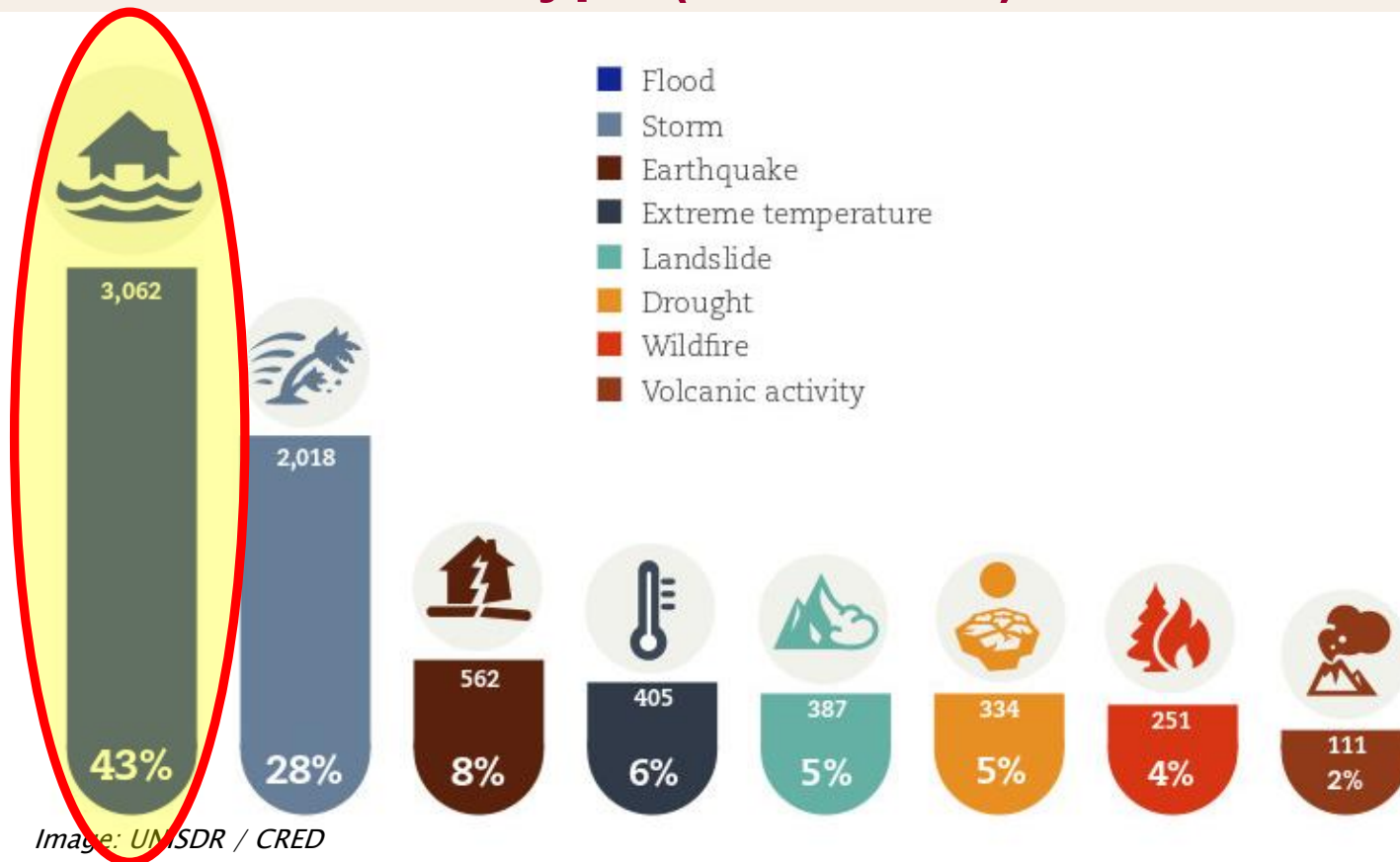


Disasters associated with natural hazards are increasing both in frequency and intensity in Europe

Numbers and types of Natural Disasters 1950–2012



Percentage of occurrences of natural disasters by disaster type (1995-2015)



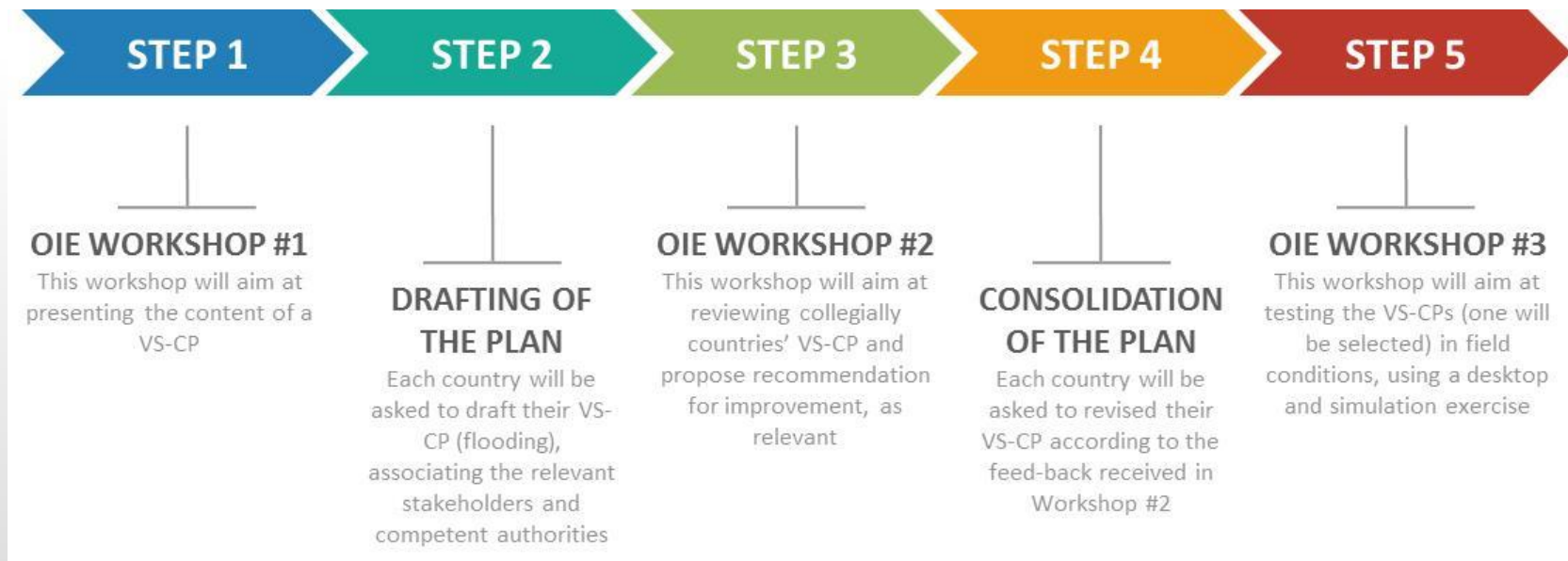
- ✓ **Many countries are often ill-prepared to cope with such natural disasters**, in particular when it comes to ensure the welfare of animals
- ✓ The OIE Guidelines on 'DMRR in relation to animal health and welfare and veterinary public health' provide a solid base for the **inclusion of Veterinary Services into National Disaster Management and Risk Reduction Plans (DMRR)**

Chapter 3.1 of the OIE TAHC

“quality of Veterinary Services”

- VSs should play a leadership role in advising the various authorities on AW (and AH and veterinary public health) in disaster situations
- VSs should develop and document appropriate procedures and standards for all providers of relevant activities and associated facilities, in particular in relation to emergency preparedness for disasters which could have impact on AH and AW

The Platform Secretariat has been tasked with **exploring, developing and implementing possible activities in order to enhance OIE MCs' DMRR capacity in Europe, in line with the OIE TAHC and Guidelines**



Day 1/Session 1 - Introductory session-setting the scene
(Plenary lectures)

Day 1/Session 2 - Understanding the countries' situation
(Countries' presentations + Group activity (Opera method) -> Plenary session)

Day 2/Session 3 - Flooding scenario (*Countries' experiences + Plenary lectures + Panel discussions*)

Day 3/Session 4: Towards developing Veterinary Services Contingency Plan (*WG + Panel discussion*)

Expected outcomes/results from the pilot approach

Targeted Balkan countries will enhance their management and response capacity on AW during natural disaster situations, with their VS-CP for hydrological disasters developed, known from relevant CAs and tested

They will also have better understanding how to mainstream VS matter in the National DMRR Plan



Thank you for your attention!